**Homework 86 Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Area of Sector Period\_\_\_\_\_\_\_\_\_ Date\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

Directions: Show all your work or LaSalle.

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| 1) A watermelon is cut into a series of round pieces. One piece measures 5 inches in diameter. When this round piece is cut into slices at equal angles through the center of the circle, there are 9 slices. What is the approximate length of the ring on the outer edge of one slice? | 2) The minute hand and the hour hands on a clock originate at the center of the clock and reach to the outer edge of the clock. The diameter of the clock is 24 inches. When it is 3:00 pm, what is the length of the arc created by the minute hand and the hour hand? |
| 3) a. Find the arc length of the circle below  b. Find area of sector | 4) a. Find the arc length of the circle below  b. Find area of sector |
| 5) A child’s bicycle wheel completes exactly three revolutions when it travels 150 cm. The wheel has a decoration on it that covers exactly half of the inner part of the wheel, as shown in the picture below. What is the area of the decoration? Leave your answer in terms of pi. | 6) Another child who sees the decoration wants to put a handmade decoration on her bike as well. Her bike completes exactly four revolutions when it travels 60 inches. How much paper does she need to use for her decoration? Leave your answer in terms of pi. |

**Make sure you finish your portfolio!!!**